Part Church, Part Car Dealer

The following is adapted from testimony delivered by Williams College economics professor Gordon Winston on Oct. 2, 2002, before the U.S. House Committee on Education and the Workforce.

Colleges and universities look a lot like ordinary businesses, and higher education looks a lot like an ordinary industry. Colleges make a product (educational services) using purchased inputs (faculty labor, heating oil, buildings) and they sell the product to customers (students) for a price (tuition). As an industry, colleges compete hard for students to whom to sell their product.

But those comforting parallels with familiar businesses are only skin-deep. There are very fundamental economic characteristics that keep the comfortable analogies from working well for higher education. Indeed, both Ph.D.s with their economic theories and ordinary people with their economic intuition and common sense face the same problem: our experience has been with ordinary businesses and ordinary industries, so it's very hard to shift gears to understand firms and an industry that are not at all ordinary.

Probably the most important single fact in understanding college costs and prices—and the most fundamental economic difference from ordinary businesses—is this: the price the student-customer pays for his or her education is strikingly less than the cost of its production. It cost $12,400 a year to educate a student at the average U.S. college in 1995-96. But he or she paid a price of $4,000. So each student got a subsidy of $8,400 a year on average. It's as if the Taurus that cost your Ford dealer $20,000 to put on the showroom floor were sold for less than $7,000—regularly and routinely. If you were poor or an exceptionally good driver, you might pay even less. Clearly, no ordinary Ford dealer would survive.

But colleges do. That's because the student subsidy is paid for by "charitable contributions," broadly defined to include private and public donations to the college, past and present: appropriations, gifts, returns on endowments and other wealth. So the average student paid just 32 cents on the dollar for his or her education; in public institutions, that price falls to 13 cents on the dollar. It's a bit cute, but a useful reminder, to think of colleges and universities as "part church and part car dealer"—they're charities, giving things away, at the same time that they're commercial firms, selling a product to their student-customers for a price, tuition. So they can't be understood simply as car dealers. Indeed, nationally, it appears that 75 percent of colleges' resources come to them in their charitable role, and only 25 percent from commercial sales revenues.

Those charitable contributions also break the link between price and cost found in an ordinary firm where price increases can usually be explained by cost increases. In Econ 101, you're taught that "in a long-run competitive equilibrium, price will come to equal unit cost." But in a college, where price (tuition) *plus* subsidy equals unit cost, it's clear that tuition *might* go up because costs go up, but it can also go up because those charitable contributions go down. And that's what's happening in a lot of public higher education right now; states are cutting per-student appropriations, leaving public institutions to either cut their production costs (and quality) or raise tuition or do a bit of both.

That's not the end of it on pricing. There's a posted sticker price for a year of college—the one the press makes much of when the College Board report on college prices comes out every fall. But not everybody pays that sticker price. Indeed, in the group of small private colleges sampled by the National Association of College and University Business Officers, only 10 percent of entering freshmen are "full-pay" students; the rest get price discounts in the form of scholarships or financial aid. So it's important not to confuse changes in sticker price with changes in what people actually pay (as the press so often does). In a recent study, Amy Schwartz of New York University and Ben Scafidi of Georgia State University corrected the higher education component of the Consumer Price Index to recognize the net prices people actually pay for college, and when they did, the "rate of inflation" fell markedly.

Those price discounts are often given for the most ordinary of business reasons: to make the product more attractive to reluctant customers and, in the case of merit aid, to improve student quality.

But a good deal of that price discounting is in service of the ideal of "equality of opportunity," such as when financial aid is given to a qualified student who isn't able to afford even a school's highly subsidized tuition, room, board and fees.

Need-based financial aid. That one is not at all compatible with business experience. It's as if the local Porsche dealer felt so strongly that every very good driver should have a high-performance car that he priced his 911s so that even the poorest of excellent drivers in the town could afford one. We recently did a study of the prices actually paid by Williams College students, relative to their family incomes, and found that kids who come from families in the bottom national income quintile—less than $24,000 a year—pay on average just $1,683 for a year at Williams. (The sticker price was $32,470). In this, Williams is typical of those high-quality schools—including Princeton, Harvard, Swarthmore, Yale, Amherst and Stanford—that use need-blind admissions and give full-need aid.

Consider two more key elements in the economics of higher education—and key differences with familiar firms and industries:

Those charitable donations to colleges and universities are *very* unevenly distributed among them. The rich schools are very much richer than the poor ones, and most of the 3,400 institutions in the United States are somewhere in between. At one end, there's Princeton or Williams with, at Williams, more than $800,000 of wealth per student—so they can sell a $75,000 a year education for that sticker price of $32,470 (and an average price, net of financial aid, of $24,000). At the other end, in the bottom quintile, a struggling little school with little more wealth than its (heavily mortgaged) buildings, charges $6,400 a year for an education that costs $8,100 to produce.

Overall, a kid in the average top decile school gets a yearly subsidy of $21,000 while one in a bottom decile school gets $1,700. The average Williams student gets $51,000 in subsidy each year. The message to take from this is that it's misleading and will often make bad policy to think of "higher education" or "colleges" as if all schools were the same, facing the same problems and the same incentives and opportunities.

The last existential-economic fact that makes colleges very different from the businesses we're familiar with has to do with the way they make their product—the way they produce educational services. It's the fact that students help educate students. In the jargon of Econ 101, our customers supply an input (student quality) to our production (of educational services) that we can't buy anywhere else. In the jargon of a more advanced economics course, customer quality "creates an externality" in the production of education. There are "peer effects." In the car example, it's as if the quality of the car you got from your Ford dealer depended on the quality of the other drivers who bought cars there; if they were very good drivers, your Ford would turn into a BMW. So schools that can afford to, care very much about who they sell their product to—who they admit. They're not indifferent, as are most business firms, because good students help produce a good education and poor students don't. That means that a major focus of competition, especially between wealthy schools, isn't for student/customers *per se* for the sake of sales; it's for *good* students for the sake of high-quality inputs to their production.

Meanwhile the federal government has long taken responsibility for low-income students, thus protecting equality of opportunity. The low-income superstar going to a rich school is doing very well, as evident in the net tuition of $1,683 for the low-income kid described above. Need-blind admissions, with (full) need-based financial aid, works.

But the worry is that the good-but-not-great low-income kid is being lost. Competition for student quality with price-discounts to the strongest students can simply use up available financial aid resources on the wealthy kids who can be bought for less—who need smaller price discounts—than the equally high-quality poor kids. And the federal government has abandoned those low-income students in favor of middle-income ones. Those who have looked at HOPE programs and tuition tax credits and the decline of Pell Grants as a fraction of college costs conclude that government tuition supplements are increasingly targeted at those who'd go to college anyway, and colleges like Georgia's are using their increased enrollment pressure to improve their student quality. The low-income kids—the focus of equality of opportunity—appear in danger of serious neglect.

I want to leave you with this:

• Don't trust your economic intuition or common sense or Econ 101 in thinking about prices and costs in higher education. It's a very odd industry, quite unlike what we're all familiar with. "Part church and part car dealer" can be a useful mantra and reminder.

• Prices (tuitions) cover roughly one-third of production costs. The rest comes from donations.

• Cost is only loosely related to price so price changes can't usually be explained by cost changes; they can often better be explained by changes in donations.

• There's a sharp hierarchy of schools, based largely on those donations and the resulting wealth that makes generalizations over all schools quite likely to be wrong.

• Students educate students, so schools care about who they sell to, and much of the competition between them, especially at the top of the hierarchy, is for student quality, not for sales.

• Low-income superstar students are doing very well at Princeton and Amherst and Swarthmore. But more ordinary poor kids are being abandoned by private price competition and by the shift of state and federal support to the middle class. ■